

Safety & Buildings Division 201 West Washington Avenue P.O. Box 2689 Madison, WI 53701-2689

Wisconsin Material Approval

Material

Fireguard® Double Wall Storage Tank

Manufacturer

Steel Tank Institute 570 Oakwood Road Lake Zurich, Illinois 60047

SCOPE OF EVALUATION

The Fireguard rectangular tanks and cylindrical tanks, with or without saddles, were evaluated as secondary containment tanks for the aboveground storage of flammable and combustible liquids in accordance with sections **ILHR 10.345** (1) and 10.415 (7)(b); for projectile resistance in accordance with s. **ILHR 10.415** (7)(b); and for fire resistance in accordance with s. **ILHR 10.415** (4)(b) of the Wisconsin Administrative Flammable and Combustible Liquids Code.

DESCRIPTION AND USE

These tanks are thermally insulated double wall storage tanks. The interstitial space between the two steel walls is filled with a lightweight concrete and insulation mixture in thicknesses of 3 inches or 6 inches to provide the thermal resistance.

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The tanks may be manufactured by any of the following manufacturers:

B&H Tank Corporation
Brown-Minneapolis Tank
Clawson Tank
Derson Manufacturing, Inc.
Hamilton Welding
J.L. Houston
International Production Specialists
Kleespie Tank
Lannon Tank
Kennedy Tank
Modern Welding of Iowa
O'Day Equipment, Inc.
Steel Tank & Fabricating Corp.

TESTS AND RESULTS

The inner tank, secondary containment and saddle design have been tested and listed in accordance with UL 142.

The insulated tank system has been listed in accordance with UL 2085 for insulated aboveground tanks. The tanks with 6 inches of insulation meet the thermal performance requirements for a 4-hour rating. Tanks with 3 inches of insulation meet the requirements for a 3-hour rating.

LIMITATIONS OF APPROVAL

The Fireguard tank with 6 inches of insulation meets the requirements for 4-hour fire exposure and may be sited using the reduced setbacks under s. ILHR 10.415 (4)(b)1.

The Fireguard tank with 3 inches of insulation meets the requirements for 3-hour fire exposure and may be sited using the reduced setbacks under s. ILHR 10.415 (4) (b)2.

The double wall tanks are approved for compliance with the secondary containment requirements of **ss. ILHR 10.345 (1)** and **10.415 (7)(b)** and may be used without a dike, except in the case of public-access waste oil collection. Tanks for public-access waste oil collection shall be provided with a dike in accordance with **s. ILHR 10.33**.

The Fireguard tank meets the ballistics protection requirement of s. ILHR 10.415 (7)(b).

Tanks up to 10,000 gallons may be used for vehicle fueling in accordance with s. ILHR 10.415.

The interstitial space shall be monitored for leaks. The monitor must be capable of detecting a leak from anywhere in the inner tank.

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Compartmentalized tanks shall be constructed with a double bulkhead in accordance with UL Standard 142. This interstitial space between compartments shall be monitored for leaks.

A spill container shall be provided at the full opening in accordance with s. ILHR 10.415 (12)(a).

Separate vehicle collision protection shall be provided by a barrier that meets the design requirements specified in s. ILHR 10.415 (8)(a).

No attachments shall be made to the tank which violate or void the UL listing.

The tank shall be installed to allow full visual inspection of the secondary containment system.

The installer shall be certified by the department in accordance with **ch. Comm 5**.

This approval will be valid through December 31, 2003, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by:			
Approval Date:	By:		
		Duane Hubeler	
		Code Consultant	
		Program Development Bureau	

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